

## CLAIMS:

1. An electromagnetic radiation delivery apparatus for skin treatment, comprising a radiation delivery head having a source of electromagnetic radiation, an emission window which is optically coupled to the source of electromagnetic radiation and is able to emit the electromagnetic radiation, and a recess which is open on one side, and vacuum means for  
5 lowering a pressure inside the recess, characterized in that the apparatus further comprises a pressure gauge for measuring a pressure inside the recess.
2. An apparatus according to claim 1, further characterized by control means connected to the pressure gauge and to the source of electromagnetic radiation, wherein the  
10 control means are able to prevent the source of electromagnetic radiation from emitting electromagnetic radiation when the pressure measured by the pressure gauge is higher than a predetermined threshold value.
3. An apparatus according to claim 2, characterized in that the threshold value is  
15 from 10 to 250 mbar below ambient pressure.
4. An apparatus according to claim 2 or 3, characterized in that, during a period of time in which the measured pressure inside the recess is below the threshold value, the control means prevent the electromagnetic radiation source from emitting electromagnetic  
20 radiation above a predetermined maximum amount of energy.
5. An apparatus according to any of claims 2-4, characterized in that the control means comprise a shutter that is able to prevent emission of the electromagnetic radiation.
- 25 6. An apparatus according to any of the preceding claims, characterized in that an emission window is present in the recess.
7. An apparatus according to any of the preceding claims, characterized in that a recess surrounds the emission window.

8. An apparatus according to any of the preceding claims, characterized in that the recess comprises a circumferential edge.
- 5 9. An apparatus according to claim 8, characterized in that the circumferential edge is flexibly deformable.
- 10 10. An apparatus according to claim 8 or 9, characterized in that the circumferential edge lies on a plane surface, on a concave surface or on a convex surface.
- 11 11. An apparatus according to one or more of the preceding claims, characterized in that the electromagnetic radiation comprises infrared radiation, visible optical radiation or ultraviolet radiation.
- 15 12. An apparatus according to one or more of the preceding claims, characterized in that the source of electromagnetic radiation comprises electromagnetic radiation generating means and electromagnetic radiation guiding means optically connected thereto.
- 20 13. An apparatus according to claim 12, characterized in that the electromagnetic radiation guiding means comprise a mirror, a hollow electromagnetic radiation guide or an optical fiber.
- 25 14. An apparatus according to one or more of the preceding claims, characterized in that the source of electromagnetic radiation comprises a laser, a flash lamp, a LED, a gas discharge lamp or an incandescent lamp.